

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An implantable sensor ~~apparatus~~ system for taking readings from a patient in vivo, the sensor ~~apparatus~~ system comprising:
an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids;
a flush sleeve directed towards the sensor tip;
a rinsing fluid; and
a fluid conduit in fluid communication with the flush sleeve, wherein a the rinsing fluid received in the fluid conduit ~~in fluid communication with the flush sleeve~~ is used to spray the sensor tip,
wherein the flush sleeve concentrically surrounds the implantable sensor around a substantially generally common axis, such that the sensor is within the flush sleeve.
2. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, further comprising a connector fitting for supporting the implantable sensor within the patient.
3. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the fluid conduit contains a septum, and wherein a needle is used to pierce the septum to inject the fluid into the fluid conduit.
4. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the flush sleeve surrounds the implantable sensor in a tight fit connection.
5. (Currently Amended) The sensor ~~apparatus~~ system of claim 4, wherein the flush sleeve contains at least one one-way valve near the sensor tip.

6. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the fluid conduit is located at a proximal end of the sensor.

7. (Currently Amended) The sensor ~~apparatus~~ system of claim 6, wherein the proximal end of the sensor is covered by a protector sleeve.

8. (Currently amended) The sensor ~~apparatus~~ system of claim 12, wherein the sensor is plugged into the connector fitting, and the connector fitting is affixable internally to the patient.

9. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the rinsing fluid is a saline solution.

10. (Currently Amended) The sensor ~~apparatus~~ system of claim 1, wherein the rinsing fluid contains an anti-coagulant.

11. (Currently Amended) The sensor ~~apparatus~~ system of claim 12, wherein the connector fitting is connected to a telemetry unit to transmit readings from the implantable sensor.

12-20. (Cancelled)

21. (Currently Amended) An implantable multi-lumen sensor ~~apparatus~~ system for taking readings from a patient in vivo, the sensor ~~apparatus~~ system comprising:
an implantable sensor having a distal end with a sensor tip for direct contact with patient fluids in an inner lumen; and
an outer lumen comprising a flush sleeve surrounding the inner lumen in a generally substantially coaxial manner, such that the inner lumen is within the outer lumen; and
a rinsing fluid received in the flush sleeve to spray the sensor tip.

22. (Currently Amended) The sensor apparatus system of claim 21, wherein the flush sleeve surrounds the inner lumen in a tight fit connection.

23. (Currently Amended) The sensor apparatus system of claim 22, wherein the flush sleeve contains at least one one-way valve near the sensor tip.